CLAIMS

We claim:

1. An illuminating waveguide comprising:

an elongated solid light transmitting body having:

a first portion extending lengthwise along said body and having a light-transmissive surface, and

a second portion extending lengthwise along said body;

wherein said first portion has a first cross-sectional shape and said second portion has a conic cross-sectional shape which directs internally-reflected light towards said first portion for transmission out of said body through said light-transmissive surface, said second cross-sectional shape being different in shape than said first cross-sectional shape.

2. The illuminating waveguide of claim 1, wherein said first cross-sectional shape is conic, whereby said body has a compound conic cross-sectional shape.

3. The illuminating waveguide of claim 1, wherein said light transmitting body is made of transparent plastic.

4. The illuminating waveguide of claim 3, wherein the light transmitting body is made of acrylic.

5. The illuminating waveguide of claim 1, wherein said second portion comprises a reflector.

6. The illuminating waveguide of claim 5, further comprising a reflective coating on said second portion.

7. The illuminating waveguide of claim 1, wherein said second cross-sectional shape has at least one focal point.

8. The illuminating waveguide of claim 7, wherein said second cross-sectional shape is parabolic.

9. The illuminating waveguide of claim 1, wherein said second cross-sectional shape is faceted.

10. The illuminating waveguide of claim 1, wherein said first cross-sectional shape is semi-circular.

11. The illuminating waveguide of claim 1, wherein said first cross-sectional shape is rectilinear.

12. The illuminating waveguide of claim 1, wherein the light-transmissive surface of said first portion extends circumferentially around a first side of said body from a first angular location to a second angular location and wherein said second portion has a surface that extends circumferentially around an opposite side of said body from said first angular location to said second angular location.

13. The illuminating waveguide of claim 12, further comprising a plurality of mounting flanges extending laterally away from said body at said first and second angular locations.

14. The illuminating waveguide of claim 1, wherein said first and second portions extend from a first end of said elongated body to a second end of said elongated body.

15. An illuminating waveguide, comprising:

an elongated solid light transmitting body having:

a first portion extending lengthwise along said body and having a first surface, and

a second portion extending lengthwise along said body and having a second surface;

wherein said first surface is transmissive to light and said second portion has a parabolic cross-sectional shape to thereby direct light internally reflecting off said second surface towards said first surface for lateral transmission of the light out of said body through said first surface.

16. The illuminating waveguide of claim 15, wherein said first portion has a conic cross-sectional shape.

17. The illuminating waveguide of claim 15, wherein said light transmitting body is made of transparent plastic.

18. The illuminating waveguide of claim 17, wherein said light transmitting body is made of acrylic.

19. The illuminating waveguide of claim 15, wherein said second portion comprises a reflector.

20. The illuminating waveguide of claim 19, further comprising a reflective coating on said second portion.

21. The illuminating waveguide of claim 15, wherein said parabolic cross-section shape of said second portion has at least one focal point.

22. The illuminating waveguide of claim 15, wherein said parabolic cross-sectional shape of said second portion is faceted.

23. The illuminating waveguide of claim 15, wherein said first portion has a semi-circular cross-sectional shape.

24. The illuminating waveguide of claim 15, wherein said first surface of said first portion is rectilinear.

25. The illuminating waveguide of claim 15, wherein said first surface extends circumferentially around a first side of said body from a first angular location to a second angular location and wherein said second surface extends circumferentially around an opposite side of said body from said first angular location to said second angular location.

26. The illuminating waveguide of claim 25, further comprising a plurality of mounting flanges extending laterally away from said body at said first and second angular locations.

27. The illuminating waveguide of claim 15, wherein said first and second portions extend from a first end of said elongated body to a second end of said elongated body.